

Analysis report

PSL14108-1

Spectral Service



Spectral Service GmbH Post box 301186 50781 Köln

PerSapiens Ltd.

Mr. Gai Ben-Dror

P.O. Box 6

Migdal HaEmeq, 23106

Israel

Laboratorium
für Auftragsanalytik GmbH

Phone: +49/(0)221/541471

Fax: +49/(0)221/541921

eMail: info@spectralservice.de

http://www.spectralservice.de

*Accelerated conditions**PS - Improved version (Supplier A)**T=0*Analysis method: quantitative ^{31}P -NMR spectroscopy according to SAA043

Instrument: Bruker Avance 300 MHz with autom. sample changer and BBI probe head

Internal standard: Triphenyl phosphate

Content [%]: 99,9 MW [g/mol]: 326,29

Initial weight test item [mg]: 1099,26

Initial weight Internal Standard [mg]: 18,41

Sample ident.: D-start, Ch.-B.: 24/8/04

Lab.-No:

Spectral Service Code: PSL14108-1

Results from: 26.08.2004

Phospholipid	Weight-%	Mol-%	MW [g/mol]
PC	5,49	14,37	770,0
1-LPC	---	---	515,0
2-LPC	0,99	3,86	515,0
PI	3,01	7,26	835,0
LPI	---	---	570,0
PS	17,66	44,68	797,2
LPS	0,28	1,10	517,0
SPH	---	---	770,0
PE	3,67	10,20	725,0
LPE	0,08	0,36	470,0
APE	1,45	2,96	990,0
PG	0,14	0,36	758,0
DPG	0,33	0,98	682,5
PA	3,91	11,52	685,0
LPA	0,25	1,16	430,0
Other	0,45	1,18	770,0
Sum	37,71	100,00	
Phosphorus	1,54		

*) = not observed, no signal assignment or < 0,02%

Limit of detection (S/N 10:1 Peak/Peak) = 0,5%

Cologne, 26. August 2004

Thorsten Buchen
(Food chemist)

Spectral Service GmbH
Vogelsanger Str. 250
D-50825 Köln-EhrenfeldGeschäftsführer:
Dr. Bernd Diehl
Dr. Werner OckelsGesellschaftssitz:
Köln HRB 20416
Gerichtsstand KölnDresdner Bank Brühl
Konto 3 888 198
BLZ 370 800 40

PSL 14108-1

0.87
0.95
0.41
0.38
0.28
0.19
0.15
0.07
0.01
0.08
0.21
0.24
2.01
2.03

Spectral Service
Leopold-King
W. Auftragsnummer 14108

Current Data Parameters

NAME PSL14108
EXPNO 10
PROCNO 1

F2 - Acquisition Parameters

Date_ 20040826
Time_ 152
INSTRUM spect
PROBHD 5 mm BBI 1H-ER
PULPROG zgpg30
TD 65536
SOLVENT CDCl3
NS 125
DS 4

SWH 5965.304 Hz
FIDRES 0.163563 Hz
AQ 2.723971 sec
RG 655.375
DWA 65.470 usec
DE 6.00 usec
TE 300.2 K
D1 10.0000000 sec
d11 0.0300000 sec

===== CHANNEL f1 =====

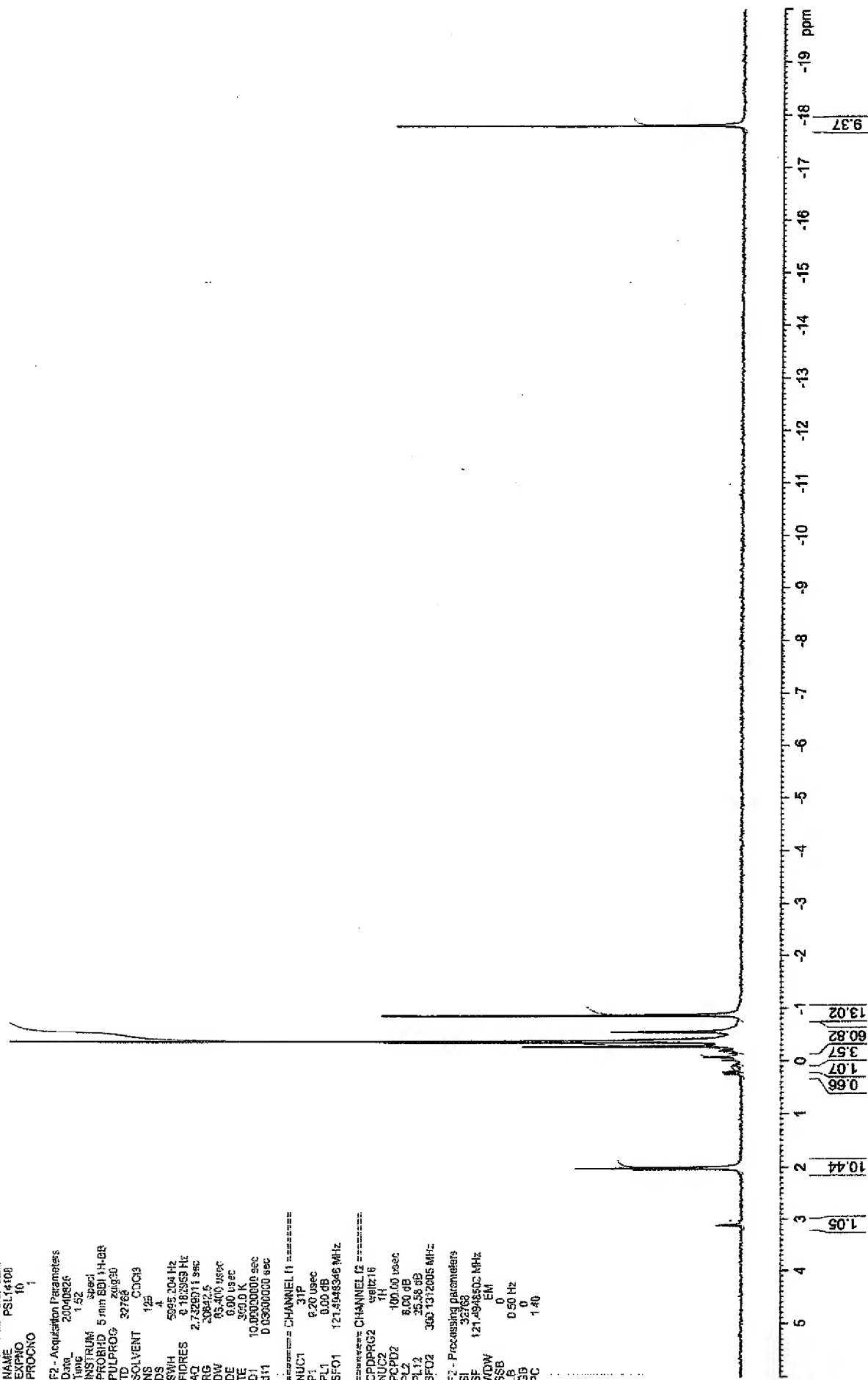
NUC1 31P
P1 8.20 usec
PL1 0.00 dB
SFO1 121.494346 MHz

===== CHANNEL f2 =====

CPDPRG2 zgpg30
NUC2 1H
P2 100.00 usec
PL2 0.00 dB
PL12 25.50 dB
SFO2 300.1312005 MHz

F2 - Processing parameters

SI 32768
SF 121.494346 MHz
WDW EM
SSB 0
LB 0.50 Hz
GB 0
PC 1.40



Analysis report

ENZ14370-10

Spectral Service



Laboratorium
für Auftragsanalytik GmbH

Spectral Service GmbH Post box 301188 50781 Köln

Enzymotec Ltd.
Mrs. Neta Scheinman
Hataasia 5 st.
Migdal HaEmeq 23106
Israel

Phone: +49/(0)221/541471
Fax: +49/(0)221/541921
eMail: info@spectralservice.de
http://www.spectralservice.de

Accelerated conditions

PS-Improved version (Supplier A)

Analysis method: quantitative ^{31}P -NMR spectroscopy according to SAA043 *2 months*
Instrument: Bruker Avance 300 MHz with autom. sample changer and BBI probe head
Internal standard: Triphenyl phosphate Content [%]: 99,9 MW [g/mol]: 326,29
Initial weight test item [mg]: 1112,36 Initial weight Internal Standard [mg]: 10,30

Sample Ident.: D-35°C 12/10/04

Lab.-No:

Spectral Service Code: ENZ14370-10

Results from: 19.10.2004

Phospholipid	Weight-%	Mol-%	MW [g/mol]
PC	5,30	13,63	770,0
1-LPC	—*)	—*)	515,0
2-LPC	0,95	3,66	515,0
PI	3,13	7,43	835,0
LPI	—*)	—*)	570,0
PS	16,08	39,98	797,2
LPS	0,06	0,22	517,0
SPH	—*)	—*)	770,0
PE	3,69	10,09	725,0
LPE	0,32	1,34	470,0
APE	2,29	4,58	990,0
PG	0,35	0,92	758,0
DPG	0,30	0,87	682,5
PA	4,37	12,63	685,0
LPA	0,42	1,95	430,0
Other	1,04	2,68	770,0
Sum	38,30	100,00	
Phosphorus	1,56		

*) = not observed, no signal assignment or < 0,02%
Limit of detection (S/N 10:1 Peak/Peak) = 0,5%

Cologne, 19. Oktober 2004

TCR
Thorsten Buchen
(Food chemist)

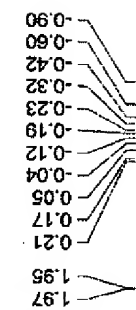
Spectral Service GmbH
Vogelsanger Str. 250
D-50825 Köln-Ehrenfeld

Geschäftsführer:
Dr. Bernd Diehl
Dr. Werner Ockels

Gesellschaftssitz:
Köln HRB 20416
Gerichtsstand Köln

Dresdner Bank Brühl
Konto 3 888 198
BLZ 370 800 40

ENZ 14370-10



Spectral Service

Lebensmittel
für Analysen

Current Data Parameters

NAME ENZ14370
EXPNO 100
PROCNO 1

F2 - Acquisition Parameters

Date_ 20041016
Time 18.35
INSTRUM spect
PROBHD 5 mm BBI 1H-BB
PULPROG zgpg30
TD 65536
SOLVENT CDCl3
NS 128
DS 4
SWH 5995.204 Hz
FIDRES 0.162859 Hz
AQ 2.7325711 sec
RG 23847.5
RW 33.400 usec
DE 6.00 usec
TE 300.0 K
TE 10.00000000 sec
D11 0.03000000 sec

===== CHANNEL f1 =====

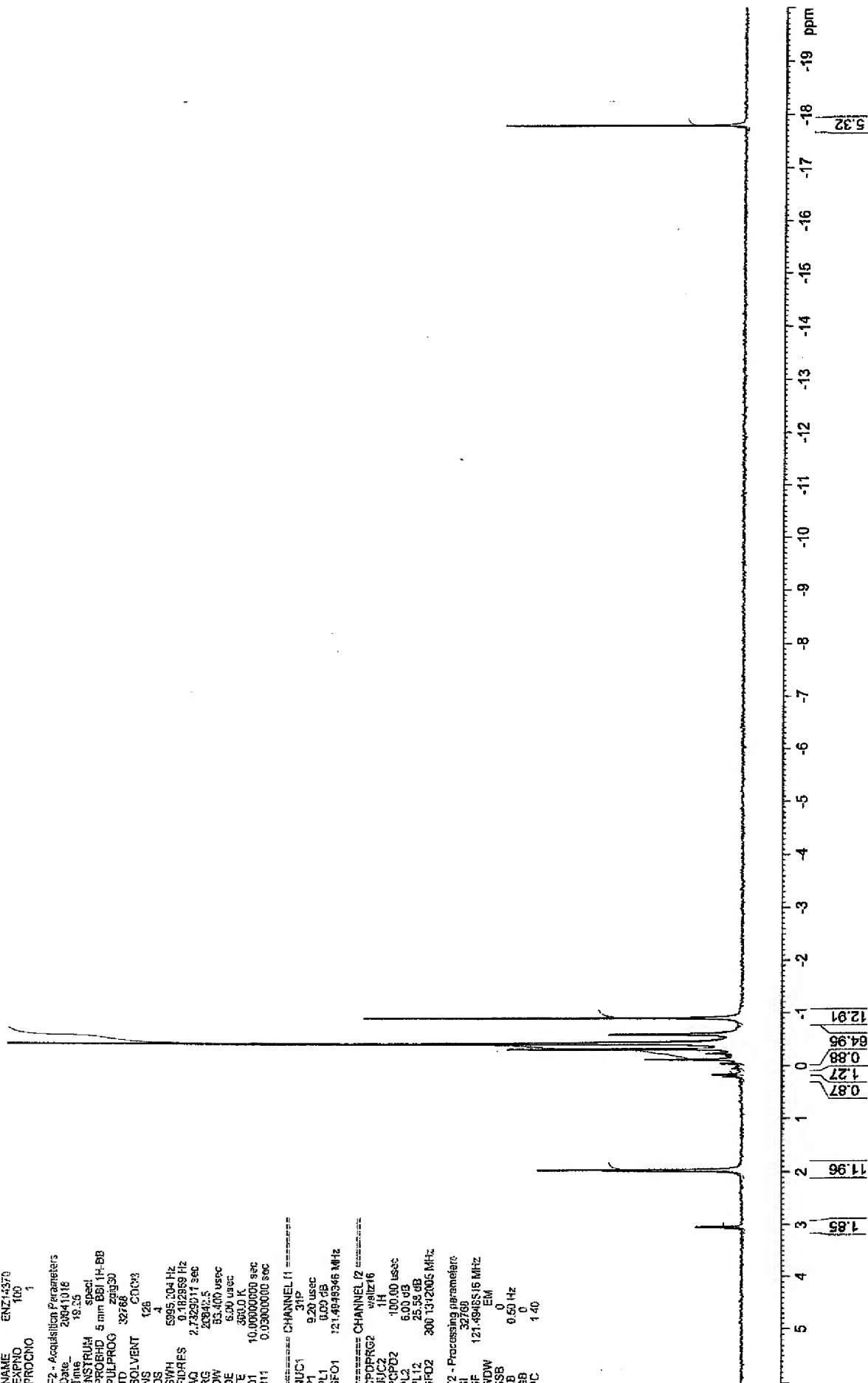
NUC1 31P
P1 0.20 usec
PL1 0.00 dB
SFO1 121.494566 MHz

===== CHANNEL f2 =====

CPDPRG2 zgpg30
X1C2 1H
PCPD2 100.00 usec
PL2 0.00 dB
PL12 25.35 dB
SFO2 300.1312005 MHz

F2 - Processing parameters

SI 32768
SF 121.494566 MHz
WDW EM
SSB 0
GB 0.50 Hz
CB 0
PC 1.40



5.32

12.91

04.96

0.88

1.27

0.87

11.96

1.65